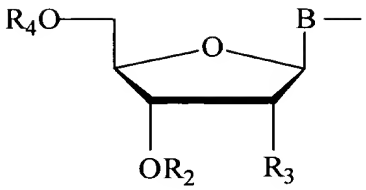


(II)

in which:

- R_2 represents H or a protective group,

- R_3 represents H, F, OH, SH, NH_2, OCH_3 or OR_5 in which R_5 represents a protective group or an alkyl chain,

- R_4 represents an H radical, a protective group or a mono-, di- or triphosphate group,

- W being attached to L via B.

8/ (Amended) Compound according to claim 6, characterized in that R_2 is an H, R_3 is an OH group and R_4 is a triphosphate group.

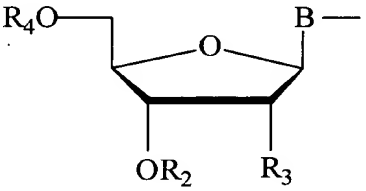
9/ (Amended) Compound according to claim 6, characterized in that R_2 is a 2-cyanoethyl-N,N-diisopropylphosphoramidite group and R_3 is H or OR_5 in which R_5 is a protective group used in oligoribonucleotide synthesis and R_4 is a 4,4'-dimethoxytrityl group.

10/ (Amended) Functionalized polynucleotide comprising at least one functionalized compound according to claim 1.

16/ (Amended) Polynucleotide according to claim 13, characterized in that L comprises at least eight atoms.

17/ (Amended) Polynucleotide according to claim 13, characterized in that L is a saturated or unsaturated hydrocarbon-based chain, optionally interrupted by at least one function chosen from amine, amide and oxy functions.

18/ (Amended) Polynucleotide according to claim 13, characterized in that W corresponds to the general formula (II)



(II)

in which:

- R_2 represents H or a protective group,

- R_3 represents H, F, OH, SH, NH_2, OCH_3 or OR_5 in which R_5 represents a protective group or an alkyl chain,

- R_4 represents an H radical, a protective group or a mono-, di- or triphosphate group,

- W being attached to L via B.

20/ (Amended) Polynucleotide according to claim 18, characterized in that R_2 is an H, R_3 is an OH group and R_4 is a triphosphate group.

21/ (Amended) Compound according to claim 18, characterized in that R_2 is a 2-cyanoethyl-N,N-diisopropylphosphoramidite group and R_3 is H or OR_5 in which R_5 is a protective group used in oligoribonucleotide synthesis and R_4 is a 4,4'-dimethoxytrityl group.

22/ (Amended) Polynucleotide according to claim 13, characterized in that the labeling reagent comprises a hydrazine or alkoxyamine function.

24/ (Amended) Method for detecting a target nucleic acid, characterized in that this target nucleic acid is brought into contact with at least one functionalized nucleotide as defined in claim 13, in the presence of elements and under conditions required for producing a polynucleotide, so as to produce a functionalized polynucleotide; the polynucleotide obtained is labeled with a labeling reagent; and then said labeled polynucleotide is detected.

26/ (Amended) Method for detecting a target nucleic acid, characterized in that this target nucleic acid is brought into contact with a functionalized polynucleotide according to claim 10; the labeling reagent is reacted; and the presence of the target nucleic acid is detected.

27/ (Amended) Method for detecting a target nucleic acid, characterized in that a labeled polynucleotide according to claim 13 is available for use, this target nucleic acid is brought into contact with the labeled polynucleotide; and the presence of the target nucleic acid is detected.

REMARKS

Claims 1-27 are pending. Claims 4-6, 8-10, 16-18, 20-22, 24 and 26-27 are amended to eliminate multiple dependencies. Prompt and favorable consideration on the merits is respectfully requested.